CLAIMS

What is claimed is:

1   1.   A real time editing system comprising:

2   a real time editing device;

3   a data transfer device in electrical communication with the real time editing

4   device; and

5   an audio/video device in electrical communication with the real time editing

6   device;

7   wherein,

8   the real time editing device receives data from the data transfer device;

9   the audio/video device transmits a signal to the real time editing device

10   corresponding to an audiovisual work being played on the audio/video

11   device;

12   the real time editing device determines the location of the audiovisual

13   work; and

14   the real time editing device edits the signal based on the received data and

15   the location of the audiovisual work and transmits the edited signal to

16   an audio/video display device.

1   2.   The real time editing system as in Claim 1, wherein the real time editing device

2   comprises:

3   a processor unit;

4   memory in electrical communication with the processor unit; and

5   a synchronization unit in electrical communication with the processor unit;

6   wherein,

7   the processor unit stores the received data in the memory;

8   the synchronization unit derives a timing mark from the signal;

9   the processor unit determines the location of the audiovisual work based

10   on a comparison of the timing mark and the received data; and

11   the processor unit edits the signal based on the received data and the

12   location of the audiovisual work.

1   3.   The real time editing system as in Claim 2, wherein the received data contains

2   timing data and editing data.

1   4.   The real time editing system as in Claim 3, wherein the processor unit compares

2   the timing data with the timing mark to determine the location of the audiovisual work

3   and edits the signal based on the location of the audiovisual work and the editing data.

1   5.   The real time editing system as in Claim 4, wherein the synchronization unit

2   derives the timing mark based on a closed captioning component of the signal.

1   6.   The real time editing system as in Claim 5, wherein the timing mark is derived

2   based on the number of ASCII characters in a closed captioning sentence of the signal.

1   7.   The real time editing system as in Claim 6, wherein the timing data contains the

2   number of ASCII characters in each closed captioning sentence for the entire audiovisual

3   work with a corresponding time stamp.

1   8.   The real time editing system as in Claim 7, wherein the processor unit:

2   determines the location of the audiovisual work by comparing the timing data

3   with the timing mark;

4   starts a clock with the initial value set to the corresponding time stamp value

5   when a match is found; and

6   edits the signal based on a comparison of the editing data and the clock time.

1   9.   The real time editing system as in Claim 2, wherein the real time editing device

2   further comprises:

3   a switch in electrical communication with the processor unit and the

4   synchronization unit;

5   wherein the processor unit edits the signal by controlling the switch and the

6   audio/video display device receives the edited signal by way of the switch.

1   10.   The real time editing system as in Claim 1, wherein the data transfer device is an

2   internet connection device and the received data is data downloaded from the internet.

1   11.   The real time editing system as in Claim 1, wherein the real time editing device is

2   included in the audio/video device.

1   12.   The real time editing system as in Claim 1, wherein the real time editing device

2   causes the audio/video device to fast forward the audiovisual work during an offensive

3   scene.

1   13.   The real time editing system as in Claim 1, wherein the operations performed by

2   the real time editing device are performed by a multi-purpose processor within the data

3   transfer device.

1   14.   A method for real time audio/video signal editing comprising:

2   receiving data corresponding to an audiovisual work;

3   receiving a signal that represents the audiovisual work;

4   determining the location of the audiovisual work; and

5   editing the signal based on the received data and location of the audiovisual

6   work.

1 15. The method for real time audio/video signal editing as in Claim 14, wherein

2 receiving data corresponding to an audiovisual work comprises:

3   downloading the data from a remote location.

1 16. The method for real time audio/video signal editing as in Claim 15, wherein the

2 data is downloaded by way of the internet.

1 17. The method for real time audio/video signal editing as in Claim 14, wherein the

2 data comprises editing data and timing data.

1 18. The method for real time audio/video signal editing as in Claim 17, further

2 comprising:

3   determining the location of the audiovisual work based on a comparison of the

4   timing data with the received signal; and

5   editing the signal based on the editing data and the location of the audiovisual

6   work.

1 19. The method for real time audio/video signal editing as in Claim 18, wherein

2 determining the location of the audiovisual work based on a comparison of the timing

3 data with the received signal further comprises:

4   deriving a timing mark from the signal;

5   deriving a time stamp from a comparison of the timing data with the timing

6   mark; and

7   setting a clock with the value of the time stamp.

1 20. The method for real time audio/video signal editing as in Claim 19, wherein the

2 timing mark is derived from a closed captioning component of the received signal.

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1   21.   A real time editing apparatus comprising:

2   a processor unit which receives a signal that represents an audiovisual work;

3   and

4   memory in electrical communication with the processor unit;

5   wherein,

6   the processor unit receives data corresponding to the audiovisual work,

7   stores the data in memory, determines the location of the audiovisual

8   work, and edits the signal based on the stored data and the location of

9   the audiovisual work.

1   22.   The real time editing apparatus as in Claim 21, further comprising:

2   a synchronization unit in electrical communication with the processor unit;

3   wherein,

4   the synchronization unit receives the signal that represents the audiovisual

5   work and derives a timing mark from the signal; and

6   the processor unit determines the location of the audiovisual work based

7   on the timing mark and the stored data.

1   23.   The real time editing apparatus as in Claim 22, wherein the stored data comprises

2   editing data and timing data.

1   24.   The real time editing apparatus as in Claim 23, wherein the synchronization unit

2   derives the timing mark based on a closed captioning component of the signal.

1   25.   The real time editing apparatus as in Claim 24, wherein the timing mark is

2   derived based on the number of ASCII characters in a closed captioning sentence of the

3   signal.

1   26.   The real time editing apparatus as in Claim 25, wherein the timing data contains

2   the number of ASCII characters in each closed captioning sentence for the entire

3   audiovisual work with a corresponding time stamp.

1   27.   The real time editing apparatus as in Claim 26, wherein the processor unit:

2   determines the location of the audiovisual work by comparing the timing data

3   with the timing mark;

4   starts a clock with the initial value set to the corresponding time stamp value

5   when a match is found; and

6   edits the signal based on a comparison of the editing data and the clock time.

1   28.   The real time editing apparatus as in Claim 22, further comprising:

2   a switch in electrical communication with the processor unit and the

3   synchronization unit;

4   wherein the processor unit edits the signal by controlling the switch and an

5   audio/video display device receives the edited signal by way of the switch.

1   29.   The real time editing apparatus as in Claim 28, wherein the processor unit and the

2   memory are contained in a transfer pack and the switch and the synchronization unit are

3   contained in a switch pack.